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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,520	10/24/2003	Alex Long	4006-271	9118
22429	7590	03/02/2007	EXAMINER	
LOWE HAUPTMAN BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			MARCHESCHI, MICHAEL A	
		ART UNIT	PAPER NUMBER	
		1755		
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/02/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/691,520	LONG, ALEX	
	Examiner	Art Unit	
	Michael A. Marcheschi	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 December 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4-7,10-15,17-21,24-32,34-39,41-50,52-56 and 60-64 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1,2,4-7,15,17-21,29-32,34-39,41 and 47 is/are allowed.
 6) Claim(s) 10-14,24-28,42-46,48-50,52-56 and 60-64 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

Claims 12, 26, 42, 43, 44, 45, 46 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is indefinite because it defines that the additional step takes place between the steps of forming of the binding layer and removing the base layer. However, claim 1, between these two steps, defines a substrate removal step. Claim 12 does not define if the additional step is before or after the substrate removal step, thus rendering the scope of the claim unclear. In addition, claim 1 now recites removing a lower portion of the base layer but claim 12 only defines removing the base layer.

Claim 26 is indefinite because it defines that the additional step takes place between the steps of forming of the binding layer and removing the base layer. However, claim 15, between these two steps, define a substrate removal step. Claim 26 does not define if the additional step is before or after the substrate removal step, thus rendering the scope of the claim unclear.

Claim 42 is indefinite because it defines that the additional step takes place between the steps of forming of the second base layer and the forming of the binding layer. However, claim 31, between these two steps, define a filling and a fixation step. Claim 42 does not define if the additional step is before or after filling and fixation steps, thus rendering the scope of the claim unclear.

Claim 44 is indefinite because it defines that the additional step takes place between the steps of forming the binding layer and removing the base layer. However, claim 31 defines removing two different base layers (first and second) and the examiner is unclear as to what base layer claim 44 is referring to, thus rendering the scope of the claim unclear. In addition, claim 31

defines a substrate removal step between the formation of the binding layer and the base removal step and claim 44 does not define if the additional step is before or after the substrate removal step, thus rendering the scope of the claim unclear. Finally, claim 31 defines a step of removing the padding particles but claim 44 does not define if the additional step is before or after the padding particle removal step.

Claim 45 is indefinite because it defines that the additional step takes place after removal of the substrate and the base layer. However, claim 31 defines removing two different base layers (first and second) and the examiner is unclear as to what base layer claim 45 is referring to, thus rendering the scope of the claim unclear. Finally, claim 31 defines a step of removing the padding particles (and fixation layer) but claim 45 does not define if the additional step is before or after the padding particle (and fixation layer) removal step.

Claim 62 is indefinite because it defines that the additional step takes place between the steps of forming of the binding layer and removing the base layer. However, claim 49, between these two steps, define a 2 removal steps. Claim 62 does not define if the additional step is before or after the 2 removal steps, thus rendering the scope of the claim unclear.

The other claims are indefinite because they depend on indefinite claims.

In all of the above indefinite rejection, the sequence of steps is not clearly defined in the claims, thus the claims should be carefully amended to clearly define the sequence intended.

Claims 10, 11, 13, 14, 24, 25, 27, 28, 48, 60 and 63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amendment to claim 10 constitutes new matter because the specification, as originally filed, never defines that the roughening step is between the steps of removing the upper portion of the base layer and forming the binding layer.

The amendment to claim 13 constitutes new matter because the specification, as originally filed, never defines that the protective layer forming step is done after removing the lower portion of the base layer.

The amendment to claim 24 constitutes new matter because the specification, as originally filed, never defines that the roughening step is between the steps of forming the fixation layer and forming the binding layer.

The amendment to claim 27 constitutes new matter because the specification, as originally filed, never defines that the protective layer forming step is done after removing the fixation layer.

The amendment to claim 48 constitutes new matter because the specification, as originally filed, never defines that additional steps take place between the steps of removing the upper portion of the base layer and forming the binding layer.

The amendment to claim 60 constitutes new matter because the specification, as originally filed, never defines that the roughening step is between the steps of forming the fixation layer and forming the binding layer.

Art Unit: 1755

The amendment to claim 63 constitutes new matter because the specification, as originally filed, never defines that the protective layer forming step is done after removing the fixation layer.

The other claims are rejected because they depend on rejected claims.

Applicant's arguments filed 12/1/06 have been fully considered but they are not persuasive.

With respect to all the amendments defined in claims 10, 11, 13, 14, 24, 25, 27, 28, 48, 60 and 63, the examiner is unable to find clear support for these and thus the amendments constitute new matter, as defined above. Applicants only statement is that no new matter is added but they fail to specifically point out literal and clear support and/or explain why the amendments are not new matter.

Applicants argue the heating step of claims 12, 26, 44 and 62 can be any time between the step of forming the binding layer and the step of removing the base layer. The examiner is unclear at to this argument because the specification never states that this heating can be preformed at any time between the two steps. However, the specification does state that the heating is done between 2 specific steps and this would imply the steps of (1) forming the binding layer, (2) heating and (3) removing the base layer with no other intermediate steps. Since the claims define intermediate steps, the claims are indefinite as defined above.

With respect to any arguments on claim 42 and 45, these claims have not been amended, as defined by applicants.

Art Unit: 1755

Claims 1, 2, 4-7, 15, 17-21, 29-32, 34-39, 41 and 47 are allowable over the prior art of record because the prior art of record fails to teach or suggest a method of making an abrasive article which comprises all of the claimed specific steps. Specifically, all the removal steps. The other claims would be allowable if amended to overcome the 112 rejections defined above.

Applicant's amendment necessitated the new ground(s) of rejection (new matter rejections) presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-12331233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/12/07

MM

Michael A. Marcheschi
Primary Examiner
Art Unit 1755